

# Statement of Basis of the Federal Operating Permit

Flint Hills Resources Houston Chemical LLC

Site Name: Flint Hills Resources Houston Chemical

Physical Location: 9822 La Porte Fwy

Nearest City: Houston

County: Harris

Permit Number: O1251

Project Type: Significant Revision

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the significant revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a significant permit revision per §§ 122.219-211. This document includes the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: September 20, 2016

## **Operating Permit Basis of Determination**

### **Description of Revisions**

The Title V permit was revised to incorporate the amendment to NSR permit 18999, PSDTX755M1, and N216 which was issued on July 12, 2016 and issuance of GHG permit GHGPSDTX137 which was issued on June 24, 2016. These permit changes authorize a planned expansion project at the site and to address permit-related violations disclosed by Flint Hill Resources as part of a voluntary environmental compliance audit. The changes to the Title V permit include:

1. Replaced all references to PSDTX755 in the New Source Review Authorization References Table and New Source Review Authorization References by Emissions Unit Table with PSDTX755M1 to reflect the PSD Modification that was issued on July 12, 2016.
2. Removed all references to permit N210 and replaced with permit N216 in the New Source Review Authorization References Table and New Source Review Authorization References by Emission Unit Table. Permit N210 was consolidated into permit N216 in the July 12, 2016 amendment to NSR permit 18999, PSDTX755M1, and N216.
3. Updated the issuance dates for NSR permits 18999, PSDTX755M1, and N216 in the New Source Review Authorization References table to reflect the July 12, 2016 issuance date.
4. Added GHGPSDTX137 to the New Source Review Authorization Reference Table and to emission units 4000-B, 4001-B, 4002-B, 4026-U, CTOWER, PLANT, and TURBINES in the New Source Review Authorization by References by Emissions Unit Table.
5. Updated the Major NSR Tables in Appendix B to reflect the July 12, 2016 version of NSR permit 18999, PSDTX755M1, and N216. The Major NSR Summary Table for permit GHGPSDTX137 was also added. The current versions of these permits are incorporated in Appendix B.

### **Permit Area Process Description**

Flint Hills Resources Houston Chemical produces propylene as its primary product. In addition, a C5 plus mixture (dripolene), mixed butanes, hydrogen, quench oil and fuel gas are generated as the byproducts of the process. Feedstock for the process is liquid propane delivered by pipeline.

**Plant Overview:** The process dehydrogenates propane over a fixed-bed catalyst to produce propylene, hydrogen, mixed butane's, C5 plus mixture and Quench Oil. A propylene/propane stream is heated and fed to a series of reactors where catalytic dehydrogenation occurs. The reactor products are compressed, dried, and separated into final olefins products. Fuel gas generated during manufacture is utilized internally in the process combustion equipment.

**Miscellaneous:** Flint Hills Resources Houston Chemical operations also include product and waste loading operations. Cooling water for the facility is provided by means of two cooling towers. Primary products and byproducts are sent to customers via pipeline and truck, dripolene is stored in a storage tank and sent out by pipeline and butanes are stored in pressure vessels and sent out via truck. Other storage tanks are used to store wastewater, storm water, or other materials ancillary to the process such as water treatment chemicals, methanol, and diesel fuel. Solvent degreasers are used at the plant for maintenance/degreasing purposes. There are also VOC fugitives at the facility as a result of the olefins process. There are also several firewater pumps and rental compressor units that are used sporadically. The Charge Gas Heater, Waste Heat Boiler and Auxiliary Boiler all vent through their respective exhaust stacks. Additionally, steam is generated at the facility to support the process operation. Steam is generated by the Waste Heat Boiler using waste heat from the reactors and supplemental fuel gas firing, the Reactor Effluent Steam Generator which uses recovered waste heat and also by the Auxiliary Boiler which is a gaseous fuel fired boiler.

### FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

### Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NO <sub>x</sub> , CO
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### Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list
- Appendix B
  - Copies of major NSR authorizations

### General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second

paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

### Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

### Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit

specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

## Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

### **Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

**Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions**

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

**Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	Yes
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

**Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

**Insignificant Activities**

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.

5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision

Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-103B	30 TAC Chapter 117, Subchapter B	R7310-01	<p>Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Unit Type = Process heater</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.</p> <p>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.</p> <p>NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average</p> <p>RACT Date Placed in Service = On or before November 15, 1992</p> <p>NOx Reduction = No NO<sub>x</sub> control method</p> <p>Fuel Type #1 = Natural gas</p> <p>NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)</p>	None
1-104BD	30 TAC Chapter 117, Subchapter B	R7310-03	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.</p> <p>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.</p> <p>NOx Reductions = No NO<sub>x</sub> reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10<sup>11</sup>) Btu/yr, based on rolling 12-month average.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-104BD	30 TAC Chapter 117, Subchapter B	R7310-03NG	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.</p> <p>NOx Reductions = No NO<sub>x</sub> reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10<sup>11</sup>) Btu/yr, based on rolling 12-month average.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-104BD	40 CFR Part 60, Subpart Db	60Db-1	<p>Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997.</p> <p>D-Series Fuel Type #1 = Natural gas.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Opacity Monitoring Type = No particulate (opacity) monitoring.</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>NOx Monitoring Type = Continuous emission monitoring system.</p> <p>SO2 Monitoring Type = No SO<sub>2</sub> monitoring.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = None.</p> <p>ACF Option - SO2 = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = OTHER UNIT TYPE</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft<sup>3</sup>.</p> <p>ACF Option - NOx = Other ACF or no ACF.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-104BD	40 CFR Part 60, Subpart Db	60Db-2	<p>Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997.</p> <p>D-Series Fuel Type #1 = Natural gas.</p> <p>D-Series Fuel Type #2 = Nonsolid non fossil fuel other than nonsolid byproduct/waste or hazardous waste.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Opacity Monitoring Type = No particulate (opacity) monitoring.</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>NOx Monitoring Type = Continuous emission monitoring system.</p> <p>SO2 Monitoring Type = No SO<sub>2</sub> monitoring.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = None.</p> <p>ACF Option - SO2 = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = OTHER UNIT TYPE</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft<sup>3</sup>.</p> <p>ACF Option - NOx = Other ACF or no ACF.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-104BD	40 CFR Part 60, Subpart Db	60Db-3	<p>Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997.</p> <p>D-Series Fuel Type #1 = Nonsolid non fossil fuel other than nonsolid byproduct/waste or hazardous waste.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Opacity Monitoring Type = No particulate (opacity) monitoring.</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>NOx Monitoring Type = Continuous emission monitoring system.</p> <p>SO2 Monitoring Type = No SO<sub>2</sub> monitoring.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = None.</p> <p>ACF Option - SO2 = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = OTHER UNIT TYPE</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>ACF Option - NOx = Other ACF or no ACF.</p>	None
1-105A	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p> <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
1-105A	30 TAC Chapter 115, HRVOC Vent Gas	R5720-06	<p>Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).</p> <p>Out of Service = Flare was not permanently out of service by April 1, 2006.</p> <p>Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.</p> <p>Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.</p> <p>Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.</p> <p>Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).</p> <p>Alternative Monitoring = No alternative monitoring and test methods are used.</p> <p>Physical Seal = Flare is equipped with a physical seal.</p> <p>Monitoring Operations = Using the flow monitoring requirements in § 115.725(d)(1)</p> <p>§115.725(h)(4) Alternative = Using the continuous monitoring requirements in § 115.725(d)(2).</p> <p>Minor Modification = No minor modifications to the monitoring and test methods are used.</p> <p>Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.</p> <p>Flare Type = Flare is in multi-purpose service.</p>	None
1-105A	40 CFR Part 60, Subpart A	60A-01	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Steam-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p> <p>Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).</p>	None
1-105A	40 CFR Part 60, Subpart A	60A-02	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Steam-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).</p> <p>Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
4000-B	30 TAC Chapter 117, Subchapter B	R7310-02	<p>Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Unit Type = Process heater</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.</p> <p>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).</p> <p>Functionally Identical Replacement = Unit is not a functionally identical replacement.</p> <p>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2)</p> <p>NOx Reduction = Post combustion control technique with ammonia injection</p> <p>Fuel Type #1 = Natural gas</p> <p>NH3 Monitoring = Continuous emission monitoring system.</p> <p>Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases</p> <p>NOx Monitoring System = Continuous emissions monitoring system</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10<sup>11</sup>) Btu/yr, based on a rolling 12-month average.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)</p>	None
4000-B	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
4001-B	40 CFR Part 60, Subpart Db	60Db-5	<p>Construction/Modification Date = Constructed or reconstructed after February 28, 2005.</p> <p>Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW).</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart KKKK = The affected facility is a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p>	None
4001-B	30 TAC Chapter 117, Subchapter B	R7310-04	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1).</p> <p>EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Averaging Method = Complying with the applicable emission limits using a block one-hour average.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2).</p> <p>NOx Reduction = Post combustion control technique with ammonia injection.</p> <p>Service Type = Duct burner used in turbine exhaust.</p> <p>NH3 Monitoring = Continuous emissions monitoring system.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
4002-B	40 CFR Part 60, Subpart Db	60Db-4	<p>Construction/Modification Date = Constructed or reconstructed after February 28, 2005.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart KKKK = The affected facility is a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p>	None
4002-B	30 TAC Chapter 117, Subchapter B	R7310-04	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1).</p> <p>EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Averaging Method = Complying with the applicable emission limits using a block one-hour average.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2).</p> <p>NOx Reduction = Post combustion control technique with ammonia injection.</p> <p>Service Type = Duct burner used in turbine exhaust.</p> <p>NH3 Monitoring = Continuous emissions monitoring system.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
4026-U	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	None
4030-EJ	30 TAC Chapter 115, HRVOC Vent Gas	R5720-04	<p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Exempt Date = The vent gas stream became exempt after 12/31/05.</p>	None
4030-EJ	30 TAC Chapter 115, Vent Gas Controls	R5121-05	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
4030-EJ	40 CFR Part 60, Subpart RRR	60RRR-02	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Reactor process not discharging its vent stream into a recovery system.</p> <p>TOC Exemption = Concentration of TOC, less methane and ethane, in the vent stream is less than 300 ppmv as measured by Method 18.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p>	None
501-D	40 CFR Part 60, Subpart RRR	60RRR-000011	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Secondary Fuel = The vent stream is introduced with the primary fuel.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is no bypass line valve.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Reactor process not discharging its vent stream into a recovery system.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Flare that meets the requirements of 40 CFR § 60.18.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
CTOWER	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-01	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>Design Capacity = Design capacity to circulate 8000 gpm or greater.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>Flow Monitoring/Testing Method = Choosing to use the maximum potential flow rate based on the manufacturer's pump performance data in accordance with §115.764(e)(1).</p> <p>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.</p>	None
CTOWER	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-02	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system in which each individual heat exchanger with greater than 100 ppmw HRVOCs is operated with the minimum pressure on the cooling water side at least 5 psig greater than the maximum pressure on the process side.</p>	None
CTOWER	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-03	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>Design Capacity = Design capacity to circulate less than 8000 gpm.</p> <p>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).</p> <p>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
DISTILLATION	40 CFR Part 60, Subpart NNN	60NNN-01	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved through use of a flare or recovery device.</p> <p>Subpart NNN Control Device = Flare.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p>	None
ENGINES	30 TAC Chapter 117, Subchapter B	R7300-01	Type of Service = Existing diesel fuel-fired engine, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed or relocated on or after October 1, 2001	None
ENGINES	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	<p>HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.</p> <p>Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008.</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Normal use.</p> <p>Stationary RICE Type = Compression ignition engine</p>	None
ENGINES	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	<p>HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.</p> <p>Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008.</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
ENGINES	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-03	<p>HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.</p> <p>Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008.</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	None
EXHAUSTVT	30 TAC Chapter 115, HRVOC Vent Gas	R5720-04	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a control device other than a flare.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>	None
F-1-L4	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>	None
F-1-L4	40 CFR Part 61, Subpart BB	61BB-01	Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FLAREVT	30 TAC Chapter 115, HRVOC Vent Gas	R5270-01	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a flare.</p> <p>Process Knowledge = Testing using the specified appropriate reference methods and procedures are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Continuous emissions monitoring system in lieu of testing requirements in § 115.725(a).</p>	None
FLAREVT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>	None
FLAREVT	30 TAC Chapter 115, Vent Gas Controls	R5121-02	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
LD-SLUDGE	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Liquefied petroleum gas (LPG)</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>	None
LD-SLUDGE	40 CFR Part 61, Subpart BB	61BB-01	Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.	None
LD-TAR	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>	None
LD-TAR	40 CFR Part 61, Subpart BB	61BB-01	Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.	None
M-1002	30 TAC Chapter 115, Storage of VOCs	R5112-01	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank (other than welded) using an external floating roof (EFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
M-1002	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal	None
M-1002	40 CFR Part 61, Subpart FF	61FF-01	Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF.	None
M-222	30 TAC Chapter 115, Storage of VOCs	R5112-02	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	None
M-222	40 CFR Part 60, Subpart Kb	60Kb-02	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using two seals mounted one above the other to form a continuous closure	None
M-223	30 TAC Chapter 115, Storage of VOCs	R5112-02	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	None
M-223	40 CFR Part 60, Subpart Kb	60Kb-02	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using two seals mounted one above the other to form a continuous closure	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PLANT	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, HRVOC Fugitive Emissions with no alternate control or control device.	None
PLANT	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	None
PLANT	40 CFR Part 60, Subpart VVa	60VVa-01	Construction/Modification Date = After November 7, 2006.	None
PLANT	40 CFR Part 61, Subpart J	61J-01	40 CFR 61 (NESHAP) SUBPART J DESIGN CAPACITY = SITE IS DESIGNED TO PRODUCE OR USE 1,000 MEGAGRAMS OF BENZENE PER YEAR OR LESS	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PLANT	40 CFR Part 61, Subpart V	61V-01	<p>Closed-vent Systems = No alternate method of emission limitation is used for closed vent systems or other control devices.</p> <p>Compressors = The fugitive unit contains compressors in VHAP service.</p> <p>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices in VHAP service.</p> <p>Flare = The fugitive unit contains flares.</p> <p>Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor VHAP service.</p> <p>Product Accumulator Vessels = The fugitive unit does not contain product accumulator vessels.</p> <p>Sampling Connection Systems = The fugitive unit contains sampling connection systems in VHAP service.</p> <p>Vacuum Service = The fugitive unit does not contain components in vacuum service.</p> <p>Valves = The fugitive unit contains valves in VHAP service.</p> <p>Vapor Recovery System = The fugitive unit does not contain vapor recovery systems in VHAP service.</p> <p>AMEL = No alternate method of emission limitation is used for compressors.</p> <p>VHAP Service = The fugitive unit contains components in VHAP service.</p> <p>Complying with 40 CFR § 61.242-11(f)(1) = Closed vent systems are complying with § 61.242-11(f)(1).</p> <p>Pumps = The fugitive unit contains pumps in VHAP service.</p> <p>AMEL = No alternate method of emission limitation is used for pumps.</p> <p>Complying with 40 CFR § 61.242-11(d) = Flares are complying with § 61.242-11(d).</p> <p>Complying with 40 CFR § 61.242-3 = Compressors are complying with § 61.242-3.</p> <p>Complying with 40 CFR § 61.242-4 = Pressure relief devices in gas/vapor service are complying with § 61.242-4.</p> <p>Complying with 40 CFR § 61.242-5 = Sampling connection systems are complying with § 61.242-5.</p> <p>Complying with 40 CFR § 61.242-7 = Valves are complying with § 61.242-7.</p> <p>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors in VHAP service.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines in VHAP service.</p> <p>Pressure Relief Devices in Liquid Service = The fugitive unit contains pressure relief devices in liquid VHAP service.</p> <p>AMEL = No alternate method of emission limitation is used for pressure relief devices in liquid service.</p> <p>Complying with 40 CFR § 61.242-2 = Pumps are complying with 40 CFR § 61.242-2.</p> <p>Complying with 40 CFR § 61.242-6 = Open-ended valves or lines are complying with § 61.242-6.</p> <p>Complying with 40 CFR § 61.242-8 = Pressure relief devices in liquid service are complying with § 61.242-8.</p>	None
PLANT	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PRO-PROPYLENE	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-01	UNIT TYPE = PROCESS	The rule citations were determined from an analysis of the rule text and the basis of determination.
REACTORS	30 TAC Chapter 115, HRVOC Vent Gas	R5270-02	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a control device other than a flare.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>	None
REACTORS	30 TAC Chapter 115, Vent Gas Controls	R5121-03	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300 degrees F (704 degrees C).</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
REACTORS	40 CFR Part 60, Subpart RRR	60RRR-01	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Reactor process not discharging its vent stream into a recovery system.</p> <p>Bypass Line Valve Secured = The bypass line valve is monitored with a flow indicator.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p>	None
SLOPLDRK	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>	None
SLOPLDRK	40 CFR Part 61, Subpart BB	61BB-01	<p>Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
SMALLTK2	30 TAC Chapter 115, Storage of VOCs	R5112-04	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	None
T-136A	30 TAC Chapter 115, Storage of VOCs	R5112-03	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	None
T-136A	40 CFR Part 60, Subpart Kb	60Kb-01	Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	None
T-136B	30 TAC Chapter 115, Storage of VOCs	R5112-03	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	None
T-136B	40 CFR Part 60, Subpart Kb	60KB-01	Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	None
TO-STK	30 TAC Chapter 117, Subchapter B	R7310-06	Maximum Rated Capacity = MRC is less than 40 MMBtu/hr	None
TURBINES	30 TAC Chapter 117, Subchapter B	R7310-05	<p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>Service Type = Used in research and testing, performance verification, to power other engines or turbines during startup, in response to and during any officially declared disaster or state of emergency, exclusively in agriculture or as chemical processing turbine.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03GS	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = Only gaseous fuel, &lt; 50% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03GS1	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = Only gaseous fuel, &lt; 50% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03NGG	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03NGG1	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03NGO	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = 100% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
TURBINES	40 CFR Part 60, Subpart KKKK	NSPSKKKK-03NGO1	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Location = The turbine is not located in a noncontinental area nor in a continental area for which the Administrator has determined does not have access to natural gas and that the removal of sulfur compounds would do more environmental harm than benefit.</p> <p>Unit Type = Combined Heat and Power Combustion Turbine</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The heat input based SO<sub>2</sub> emission standard in § 60.4330(a)(2) or (a)(3) is being used.</p> <p>Fuel Monitoring = All fuels used are demonstrated not to exceed the potential emissions standard in § 60.4365.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for mechanical drive.</p> <p>Fuel Quality = Fuel is demonstrated not to exceed emission standard by representative fuel sampling data.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Type = 100% natural gas.</p>	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-HIVP	<p>Chapter 115 Control Device Type = No control device.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.</p> <p>Control Options = Vapor balance system.</p>	None
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-LOWVP	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>	None
V-1-L4	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-02	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Liquefied petroleum gas (LPG)</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor balance system.</p>	None
V-1-L4	40 CFR Part 61, Subpart BB	61BB-01	Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.	None

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
V-2-L4	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-02	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Liquefied petroleum gas (LPG)</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading greater than or equal to 20,000 gallons per day.</p> <p>Control Options = Vapor balance system.</p>	None
V-2-L4	40 CFR Part 61, Subpart BB	61BB-01	Negative Applicability = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.	None
WWU	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-01	UNIT TYPE = PROCESS	The rule citations were determined from an analysis of the rule text and the basis of determination.

\* - The “unit attributes” or operating conditions that determine what requirements apply

\*\* - Notes changes made to the automated results from the DSS, and a brief explanation why

## NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[www.tceq.texas.gov/permitting/air/nav/air\\_status\\_permits.html](http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html)

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: GHGPSDTX137	Issuance Date: 06/24/2016
PSD Permit No.: PSDTX755M1	Issuance Date: 07/12/2016
<b>Nonattainment (NA) Permits</b>	
NA Permit No.: N216	Issuance Date: 07/12/2016
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 18999	Issuance Date: 07/12/2016
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.451	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000

Number: 106.475	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 09/04/2000
Number: 6	Version No./Date: 01/08/1980

### **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

### **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

## Rationale for Periodic Monitoring Methods Selected

### Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: EXHAUSTVT	
Control Device ID No.: 4000-B	Control Device Type: Other Control Device Type
Control Device ID No.: 4001-B	Control Device Type: Other Control Device Type
Control Device ID No.: 4002-B	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5720-04
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Temperature	
Minimum Frequency: One point per hour	
Averaging Period: Hourly	
Deviation Limit: If the minimum temperature is below the specified temperatures for emission units 4000-B, 4001-B, or 4002-B detailed in the most recent NSR permit (Permit Nos. 18999 and PSDTX755), while fuel gas is directed to the control device, a potential deviation has occurred. Temperatures below this value are permissible as demonstrated in performance testing conducted in accordance with Permit Nos. 18999 and PSDTX755 and/or any other applicable permit or regulation. In order to determine if a deviation from 30 TAC 115.722(c)(1) has occurred, the HRVOC emissions from all applicable sources at the site will be calculated to conclude whether or not the 1,200 pounds of HRVOC per one-hour block period has been exceeded for the site.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: REACTORS	
Control Device ID No.: 4002-B	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-03
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Temperature	
Minimum Frequency: One point per hour	
Averaging Period: Hourly	
<p>Deviation Limit: If the minimum temperature is below the specified temperatures for emission unit 4002-B detailed in the most recent NSR permit (Permit Nos. 18999 and PSDTX755), while reactor vent gas is directed to the control device, a potential deviation has occurred. Temperatures below this value are permissible as demonstrated in performance testing conducted in accordance with Permit Nos. 18999 and PSDTX755 and/or any other applicable permit or regulation.</p>	
<p>Basis of monitoring:  It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.</p>	

Unit/Group/Process Information	
ID No.: REACTORS	
Control Device ID No.: 4002-B	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5270-02
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Temperature	
Minimum Frequency: One Point Per Hour	
Averaging Period: Hourly	
<p>Deviation Limit: If the minimum temperature is below the specified temperatures for emission unit 4002-B detailed in the most recent NSR permit (Permit Nos. 18999 and PSDTX755), while reactor vent gas is directed to the control device, a potential deviation has occurred. Temperatures below this value are permissible as demonstrated in performance testing conducted in accordance with Permit Nos. 18999 and PSDTX755 and/or any other applicable permit or regulation. In order to determine if a deviation from 30 TAC 115.722(c)(1) has occurred, the HRVOC emissions from all applicable sources at the site will be calculated to conclude whether or not the 1,200 pounds of HRVOC per one-hour block period has been exceeded for the site.</p>	
<p>Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.</p>	

## Compliance Review

### Compliance History Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on .....9/20/16  
Site rating: 3.54 / Satisfactory Company rating: 3.22 / Satisfactory  
(High < 0.10; Satisfactory ≥ 0.10 and < 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? ..... No

### Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes  
OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes  
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes

OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes  
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes